

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/760,647	01/17/2001	Naoto Kinjo	Q62079 3441		
7590 04/20/2005 SUGHRUE, MION, ZINN, MACPEAK & SEAS 2100 Pennsylvania Avenue, N.W. Washington, DC 20037			EXAMINER		
			LONG, HE	LONG, HEATHER R	
			ART UNIT	PAPER NUMBER	
•			2615		

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<del>_</del>	Application No.	Applicant(s)				
	09/760,647	KINJO, NAOTO				
Office Action Summary	Examiner	Art Unit				
	Heather R Long	2615				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be timed within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	ely filed  s will be considered timely. the mailing date of this communication.  O (35 U.S.C. § 133).				
Status						
Responsive to communication(s) filed on <u>03 Not</u> This action is <b>FINAL</b> . 2b) ☐ This     Since this application is in condition for alloware closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro					
Disposition of Claims		·				
4) ☐ Claim(s) 1-23 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-23 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.					
Application Papers						
9)☐ The specification is objected to by the Examine 10)☒ The drawing(s) filed on 17 January 2001 is/are:  Applicant may not request that any objection to the oreology and the correction of th	a) $\square$ accepted or b) $\square$ objected drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:					

Art Unit: 2615

#### **DETAILED ACTION**

### Response to Arguments

1. Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 1, 8, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Allen et al. (U.S. Patent 5,737,491).

Regarding claim 1, Allen et al. discloses an image processing method comprising the steps of: receiving at least one of photographed image data, temporary camera (10) control information, additional information and indication information of a desired processing content from a camera (10) (col. 3, lines 49-51; col. 4, lines 14-28: photographed image data and indication information); reasoning out or creating at least one information of information relating to

photographing control, information relating to image processing and information relating to the photographed image, in accordance with the at least one of the photographed image data, the temporary camera control information, the additional information and the indication information which have been received (col. 4, lines 24-28; col. 14, line 55 – col. 5, line 3; col. 5, lines 14-17), wherein the at least one of temporary camera control information, additional information and indication information of a desired processing content form the camera (10) relates to the photographed image data obtained by photographing with the camera (10) (the indication information tells the fulfillment server what to do with the photographed image data, it may be to print it or to forward it somewhere else).

Page 3

Regarding claim **8**, Allen et al. discloses an image processing apparatus comprising: a receiving/supplying unit which receives at least one of photographed image data, temporary camera control information, additional information and indication information of a desired processing content from a camera (10) having an image sensor and capable of obtaining the photographed image data (col. 3, lines 49-51; col. 4, lines 14-28: photographing image data and indication information); and an information processing unit (34) which reasons out or creates at least one information of information relating to photographing control, information relating to image processing and information relating to a photographed image in accordance with the at least one of the photographed image data, the temporary camera control information, the additional information

and the indication information (col. 4, lines 24-28; col. 14, line 55 – col. 5, line 3; col. 5, lines 14-17), wherein the at least one of temporary camera control information, additional information and indication information of a desired processing content from the camera (10) relates to the photographed image data obtained by photographing with the camera (10) (the indication information tells the fulfillment server what to do with the photographed image data, it may be to print or to forward it somewhere else).

Regarding claim **20**, Allen et al. discloses an image processing method comprising the steps of: receiving photographed image data and at least one of temporary camera control information, additional information and indication information of a desired processing content from a camera (10) (col. 3, lines 49-51; col. 4, lines 14-28: photographed image data and indication information); and reasoning out or creating at least one of information relating to photographing control, information relating to image processing and information relating to a photographed image, in accordance with the photographed image data and at least one of the temporary camera control information, the additional information and the indication information which have been received (col. 4, lines 24-28; col. 14, line 55 – col. 5, line 3; col. 5, lines 14-17).

4. Claims 1-6, 8-12, 14, 15, 17, and 20-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Tullis (U.S. Patent 6,535,243).

Regarding claim 1, Tullis discloses an image processing method comprising the steps of: receiving at least one of photographed image data, temporary camera control information, additional information and indication information of a desired processing content from a camera (40) (col. 2, lines 46-48; col. 6, lines 26-33); and reasoning out or creating at least one information of information relating to photographing control, information relating to image processing and information relating to a photographed image, in accordance with the at least one of the photographed image data, the temporary camera control information, the additional information and the indication information which have been received (col. 2, lines 58-65), wherein the at least one of temporary camera control information, additional information and indication information of a desired processing content from the camera (40) relates to the photographed image data obtained by photographing with the camera (40) (col. 2, lines 58-65; col. 6, lines 26-33).

Regarding claim **2**, Tullis discloses all the limitations as previously discussed with respect to claim 1 including the information relating to the photographed image is information related to a subject or a photographing condition (col. 6, lines 26-33; col. 3, lines 6-11).

Regarding claim 3, Tullis discloses all the limitations as previously discussed with respect to claim 1, including the at least one information reasoned out or created is supplied to the camera (40) (col. 2, line 65 col. 3, line 1).

Art Unit: 2615

Regarding claim 4, Tullis discloses all the limitations as previously discussed with respect to claim 1, including that the step of receiving the at least one of the photographed image data, the temporary camera control information, the additional information and the indication information from the camera (40) and the step of supplying the at least one information to the camera (40) are performed by wired or radio communications (col. 2, lines 40-43).

Regarding claim **5**, Tullis discloses all the limitations as previously discussed with respect to claim 1, including that the information relating to the photographed image is principal subject information reasoned out or created in accordance with the photographed image data, wherein the information relating to the photographing control is at least one of camera control information set in accordance with the principal subject information and camera position information reasoned out or created in accordance with the photographed image data and photographing place information as the additional information, and wherein at least one of the principal subject information, the camera control information and the camera position information is supplied to the camera (40) (col. 3, lines 6-11 and 26-30; col. 6, lines 26-33 – the zoom factor being adjusted would changed the camera (40) position according to the subject in the photograph).

Regarding claim **6**, Tullis discloses all the limitations as previously discussed with respect to claim 1, including that the additional information is at least one of information relating to deterioration of marginal lumination of the

camera (40), information relating to poor focus of the camera (40), information relating to gradation control of density or color of an image, information relating to sharpness enhancement processing or smoothing processing of the image, information relating to geometrical adjustment of the image and information relating to designation of an applicable area of these image processing, and wherein the information relating to the image processing is reasoned out or created in accordance with the additional information received from the camera (40) (col. 2, line 58 – col. 2, line 11; col. 6, lines 26-33).

Regarding claim **8**, Tullis discloses an image processing apparatus comprising: a receiving/supplying unit which receives at least one of photographed image data, temporary camera control information, additional information and indication information of a desired processing content from a camera (40) having an image sensor and capable of obtaining the photographed image data (col. 2, lines 46-48); and an information processing unit (10) which reasons out or creates at least one information of information relating to photographing control, information relating to image processing and information relating to a photographed image in accordance with the at least one of the photographed image data, the temporary camera control information, the additional information and the indication information (col. 2, lines 58-65), wherein the at least one of temporary camera control information, additional information and indication information of a desired processing content from the camera (40)

relates to the photographed image data obtained by photographing with the camera (40) (col. 2, lines 58-65; col. 6, lines 26-33).

Regarding claim **9**, Tullis discloses all the limitations as previously discussed with respect to claim 8, including that the information processing unit supplies the at least one information reasoned out or created to the camera (40) by the receiving/supplying unit in accordance with processing to be performed (col. 2, line 65 col. 3, line 1).

Regarding claim **10**, Tullis discloses all the limitations as previously discussed with respect to claim 8, including that the receiving/supplying unit is an information communication unit (col. 2, lines 40-43).

Regarding claim 11, Tullis discloses all the limitations as previously discussed with respect to claim 8, including that the information relating to the photographed image is principal subject information reasoned out or created in accordance with the photographed image data, wherein the information relating to the photographing control is at least one of camera control information set in accordance with the principal subject information and camera position information reasoned out or created in accordance with the photographed image data and photographing place information as the additional information, and wherein the information processing unit supplies at least one of the principal subject information, the camera control information and the camera position information which have been reasoned out or created to the camera (40) by the receiving/supplying unit (col. 3, lines 6-11 and 26-30; col. 6, lines 26-33 – the

Art Unit: 2615

zoom factor being adjusted would changed the camera (40) position according to the subject in the photograph).

Page 9

Regarding claim **12**, Tullis discloses all the limitations as previously discussed with respect to claim 8, including that the additional information is at least one of information relating to deterioration of marginal lumination of the camera (40), information relating to poor focus of the camera (40), information relating to gradation control of density or color of an image, information relating to sharpness enhancement processing or smoothing processing of the image, information relating to geometrical adjustment of the image and information relating to designation of an applicable area of these image processing, and wherein the information relating to the image processing is reasoned out or creates the information in accordance with the additional information which has been received (col. 2, line 58 – col. 2, line 11; col. 6, lines 26-33).

Regarding claim 14, Tullis discloses a camera (40) comprising: an image sensor (48) for obtaining photographed image data; an input unit for inputting at least one of additional information and indication information of a desired processing content (64) (Fig. 2); and an information sending/receiving unit (14 and 72) for sending at least one of the photographed image data which has been obtained, temporary camera control information which has temporarily been set, the additional information which has been inputted and the indication information which has been inputted to an image processing apparatus, as well as, receives at least one information of information relating to photographing control,

Art Unit: 2615

information relating to image processing and information relating to photographed image which have been reasoned out or created by the image processing apparatus in accordance with the at least one of the photographed image data, the temporary camera control information, the additional information and the indication information, from the image processing apparatus (col. 2, lines 46-48 and 58-65; col. 6, lines 26-33), wherein the at least one of the temporary camera control information, the additional information and the indication information relates to the photographed image data obtained by photographing with the camera (40) (col. 2, lines 58-65; col. 6, lines 26-33).

Regarding claim **15**, Tullis discloses a photographing system comprising: a camera (40); and an image processing apparatus (10); wherein the camera (40) comprises: an image sensor (48) for obtaining photographed image data; an input unit (64) for inputting at least one of additional information and indication information of a desired processing content; and an information sending/receiving unit (72) for sending at least one of the photographed image data which has been obtained, temporary camera control information which has temporarily been set, the additional information which has been inputted and the indication information which has been inputted to the image processing apparatus, as well as, receives at least one information of information relating to photographing control, information relating to image processing and information relating to a photographed image which have been reasoned out or created by the image processing apparatus in accordance with the at least one of the

photographed image data, the temporary camera control information, the additional information and the indication information, from the image processing apparatus; and wherein the image processing apparatus comprises: a receiving/supplying unit which receives the at least one of the photographed image data, the temporary camera control information, the additional information and the indication information from the camera (40) (Fig. 2; col. 2, lines 26-33 and 58-65; col. 6, lines 26-33); and an information processing unit (10) which reasons out or creates the at least one information of the information relating to the photographing control, the information relating to the image processing and the information relating to the photographed image in accordance with the at least one of the photographed image data, the temporary camera control information, the additional information and the indication information, wherein the at least one of the temporary camera control information, the additional information and the indication information relates to the photographed image data obtained by photographing with the camera (40) (Fig. 2; col. 2, lines 26-33 and 58-65; col. 6, lines 26-33).

Regarding claim 17, Tullis discloses all the limitations as previously discussed with respect to claim 15, including that the information processing apparatus is a portable external apparatus which is directly connectable to the camera (40) or an installation-type apparatus which can communicate with the camera (40) (Fig. 2, the computer may be directly connected to the camera using wires).

Art Unit: 2615

Regarding claim **20**, Tullis discloses an image processing method comprising the steps of: receiving photographed image data and at least one of temporary camera control information, additional information and indication information of a desired processing content from a camera (40) (col. 2, lines 46-48; col. 6, lines 26-33); and reasoning out or creating at least one of information relating to photographing control, information relating to image processing and information relating to a photographed image, in accordance with the photographed image data and at least one of the temporary camera control information, the additional information and the indication information which have been received (col. 2, lines 58-65).

Regarding claim **21**, Tullis discloses an image processing apparatus comprising: a receiving/supplying unit which receives photographed image data and at least one of temporary camera control information, additional information and indication information of a desired processing content from a camera (40) having an image sensor and capable of obtaining the photographed image data (col. 2, lines 46-48); and an information processing unit (10) which reasons out or creates at least one information of information relating to photographing control, information relating to image processing and information relating to a photographed image in accordance with the at least one of the photographed image data, the temporary camera control information, the additional information and the indication information (col. 2, lines 58-65).

Regarding claim 22, Tullis discloses a camera (40) comprising: an image sensor (48) for obtaining photographed image data; an input unit for inputting at least one of additional information and indication information of a desired processing content (64) (Fig. 2); and an information sending/receiving unit (14 and 72) for sending photographed image data which has been obtained and at least one of temporary camera control information which has temporarily been set, the additional information which has been inputted and the indication information which has been inputted to an image processing apparatus, as well as, receives at least one information of information relating to photographing control, information relating to image processing and information relating to photographed image which have been reasoned out or created by the image processing apparatus in accordance with the photographed image data and at least one of the temporary camera control information, the additional information and the indication information, from the image processing apparatus (col. 2, lines 46-48 and 58-65; col. 6, lines 26-33).

Regarding claim 23, Tullis discloses a photographing system comprising: a camera (40); and an image processing apparatus (10); wherein the camera (40) comprises: an image sensor (48) for obtaining photographed image data; an input unit (64) for inputting at least one of additional information and indication information of a desired processing content; and an information sending/receiving unit (72) for sending the photographed image data which has been obtained and at least one of temporary camera control information which

has temporarily been set, the additional information which has been inputted and the indication information which has been inputted to the image processing apparatus, as well as, receives at least one information of information relating to photographing control, information relating to image processing and information relating to a photographed image which have been reasoned out or created by the image processing apparatus in accordance with the at least one of the photographed image data, the temporary camera control information, the additional information and the indication information, from the image processing apparatus; and wherein the image processing apparatus comprises: a receiving/supplying unit which receives the at least one of the photographed image data, the temporary camera control information, the additional information and the indication information from the camera (40) (Fig. 2; col. 2, lines 26-33 and 58-65; col. 6, lines 26-33); and an information processing unit (10) which reasons out or creates the at least one information of the information relating to the photographing control, the information relating to the image processing and the information relating to the photographed image in accordance with the photographed image data and at least one of the temporary camera control information, the additional information and the indication information (Fig. 2; col. 2, lines 26-33 and 58-65; col. 6, lines 26-33).

Art Unit: 2615

## Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tullis (U.S. Patent 6,535,243).

Regarding claim 7, Tullis discloses all the limitations as previously discussed with respect to claim 1. Furthermore, Tullis discloses an image processing method wherein the additional information is at least one of information related to an image to be composited in an output image and information related to a character to be composited in the output image, wherein at least one of information related to a composite image and information related to a composite character is reasoned out or created in accordance with the additional information received from the camera (40), and wherein at least one of the information related to the composite image and the information related to the composite character which have been reasoned out or created is supplied to the camera (40) (col. 3, lines 26-30; col. 7, lines 58-63). The time and/or date are included with the image data as it is sent to the host computer. Furthermore, it is well known in the art that the time and/or date is an image that is composited in the output image when the image is printed. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to

have combined the teaching of printing the time and/or date on the image to be sent to the host computer to be reasoned out and sent back to camera (40) to display the image with the time and/or date so the user would know when the image was taken. Furthermore, the host computer is able to search for other pictures taken around that time or date.

Regarding claim 13, Tullis discloses all the limitations as previously discussed with respect to claim 1. Furthermore, Tullis discloses an image processing method wherein the additional information is at least one of information related to an image to be composited in an output image and information related to a character to be composited in the output image, wherein the information processing unit reasons out or creates at least one of information related to a composite image and information related to a composite character in accordance with the additional information which has been received and supplies at least one of the information related to the composite image and the information related to the composite character which have been reasoned out or created to the camera (40) (col. 3, lines 26-30; col. 7, lines 58-63). The time and/or date are included with the image data as it is sent to the host computer. Furthermore, it is well known in the art that the time and/or date is an image that is composited in the output image when the image is printed. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teaching of printing the time and/or date on the image to be sent to the host computer to be reasoned out and sent back to camera (40) to

**Art Unit: 2615** 

display the image with the time and/or date so the user would know when the image was taken. Furthermore, the host computer is able to search for other pictures taken around that time or date.

7. Claims 16, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tullis as applied to claims 1 and 15 above, and further in view of Allen et al. (U.S. Patent 5,737,491).

Regarding claim **16**, Tullis discloses all the limitations as discussed with respect to claim 1, except that the image processing method further comprises: connecting the camera to one or more portable external apparatus wherein an order of priority is preliminary set among the one or more portable external apparatus; and performing image processing according to the priority of the one or more portable external apparatus.

Referring to the Allen et al. reference, Allen et al. discloses a camera (10) that is connected to one or more portable external apparatus (27). Official Notice is taken that an order of priority is preliminary set among the one or more portable external apparatus, and performing image processing according to the priority of the one or more portable external apparatus. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that there exists an order of priority among one or more external apparatus connected to a camera in order for the camera to except information from the external apparatus and be able to process it completely because if no priority

Art Unit: 2615

was set then the camera would be receiving information from all external sources and may be processing them in the wrong order, which could ruin the image.

Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have connected the camera to one or more external apparatus as taught by Allen et al. with the camera in the Tullis reference in order to allow the camera to receive information from other sources to further improve the image quality.

Regarding claim **18**, Tullis discloses all the limitations as discussed with respect to claims 15 and 17, except that the installation-type apparatus is installed in a lab shop.

Referring to the Allen et al. reference, Allen et al. discloses a camera (10) that is connected to an image processing apparatus (34) that is installed in a lab shop (col. 1, lines 60-64).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teaching of having the image processing apparatus be installed in a lab shop as taught by Allen et al. with the system as disclosed by Tullis in order to be able to send information to the image processing apparatus to print the images a certain way, which would make the system more versatile.

Regarding claim **9** Tullis discloses all the limitations as discussed with respect to claim 15, except that the wherein the camera is connected with one or more types of portable external apparatus and one or more types of installation-

Art Unit: 2615

type apparatus whereupon priorities to be applied for image processing is preliminarily set among the one or more types of the external apparatus and one or more types of the installation-type apparatus, and wherein the apparatus to be applied for image processing is changed in accordance with capability of executing a specified image processing content.

Referring to the Allen et al. reference, Allen et al. discloses a camera (10) that is connected to one or more portable external apparatus (27). Official Notice is taken that an order of priority is preliminary set among the one or more portable external apparatus, and performing image processing according to the priority of the one or more portable external apparatus. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that there exists an order of priority among one or more external apparatus connected to a camera in order for the camera to except information from the external apparatus and be able to process it completely because if no priority was set then the camera would be receiving information from all external sources and may be processing them in the wrong order, which could ruin the image.

Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have connected the camera to one or more external apparatus as taught by Allen et al. with the camera in the Tullis reference in order to allow the camera to receive information from other sources to further improve the image quality.

Art Unit: 2615

#### Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heather R Long whose telephone number is 571-272-7368. The examiner can normally be reached on Mon. - Thurs.: 7:00 am - 4:30 pm, and every other Fri.: 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on 571-272-7950. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2615

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Heather R Long Examiner Art Unit 2615

HRL April 18, 2005

PRIMARY EXAMINER